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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,543	04/08/2004	Deshitha Airawana Edirisuriya	1171/40711A/127A-CIP	8375
279 7590 02/13/2007 Trexler, Bushnell, Giangiorgi, Blackstone & Marr, Ltd. 105 West Adams Street Suite 3600 Chicago, IL 60603			EXAMINER WOLLSCHLAGER, JEFFREY MICHAEL	
			ART UNIT 1732	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/13/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/820,543	EDIRISURIYA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jeff Wollschlager	1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election without traverse of Group I, claims 1-3 and 6-9, in the reply filed on December 6, 2006 is acknowledged. Claims 4 and 5 are withdrawn from further consideration. The paper filed December 6, 2006 describing the apparent confusion regarding the office action dated October 2, 2006 directed to the rejection of the claims of Group II, is acknowledged. Accordingly, a non-final office action addressing the elected invention follows.

Additionally, the examiner notes that instant claims 1-3 are substantially the same as claims 1-3 presented in parent application 10/314,812. These claims were rejected by Examiner Ortiz in an office action dated February 24, 2006 and amended in response to the office action. The amended claims have issued as claims 1-3 in U.S. Patent 7,157,035. Accordingly, the rejection of claims 1-3 in the parent application is substantially duplicated for instant claims 1-3.

### ***Priority***

Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application). The disclosure of the invention in the parent

application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

The disclosure of the prior-filed application, Application No. 10/314,812, now U.S. Patent 7,157,035, fails to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for one or more claims of this application. Claims 6-9 do not find adequate support in the parent application. Accordingly, claims 1-5 are afforded the priority date of the parent application. Claims 6-9 are afforded a priority date of April 8, 2004.

#### ***Terminal Disclaimer***

The terminal disclaimer filed on May 24, 2006 in the parent application linking 10/314,812, now U.S. Patent 7,157,0035, with the instant application has been recorded.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, line 3, "of the type" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "the type"), thereby rendering the scope of the claim(s)

unascertainable. In claim 1, line 5, "said conduit" should be preceded by a recitation of providing the conduit. In claim 1, line 6, "the ends" does not have proper antecedent basis. In claim 1, line 8, it is unclear which "end" is being referred. Claim 3 is indefinite, particularly line 2 "said sleeve the edge"- an amendment is required to clarify if this is a typographical error or is intended; if intended, the "edge" does not have antecedent basis, and it is unclear as to what "the edge" further limits. As to claim 7, the limiting effect of a rubber having a "low melting point" is unclear.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Woodward et al. (U.S. Patent 2,733,734).

Regarding claim 6, Woodward et al. disclose a method of making a flexible hose/conduit with a connector on the end comprising: overmolding a soft flexible rubber topping onto said conduit, including positions proximal to the end of said conduit (a') (col. 2, lines 4-23) followed by molding said connector (e) over said conduit and said

Art Unit: 1732

rubber topping causing said cuff to become an integral part of the inner surface of the connector (col. 2, lines 25-52; Figures 2 and 4-6).

The examiner notes that the instant usage of the word "cuff" and the usage of the word "cuff" employed by Woodward et al. have different meanings. The cuff employed by Woodward et al. is the instant connector.

As to claim 7, the rubber employed by Woodward et al. inherently meets the broad limitation.

As to claims 8 and 9, Woodward et al. disclose a conduit having a helically wound tube and includes at least one electrical conductor wrapped around the conduit as claimed (col. 1, lines 33-35; Figures 2 and 4-6)

Claims 6-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Edirisuriya et al (U.S. Patent Application Publication 2003/0236015; published December 25, 2003; filed June 2, 2003).

Regarding claims 6 and 7, Edirisuriya et al. disclose a method of forming a connector on the end of a flexible conduit comprising the steps of: overmolding a soft, flexible elastomeric material, which inherently meets the broad limitation of having a low melting point, on the conduit proximal to the end of the conduit such that the cuff blends with the conduit and, either simultaneously with the overmolding step or after the overmolding step, molding said connector over said conduit and said cuff causing the cuff to become an integral part of the inner surface of the connector (paragraphs [0058-0075; Figures 18-23).

As to claims 8 and 9, Edirisuriya et al. disclose a conduit having a helically wound tube and includes at least one electrical conductor wrapped around the conduit as claimed (paragraph [0083]).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartel et al., USP 5,302,336.

Regarding claim 1, Hartel substantially teaches the basic claimed process of molding a connector on the end of a conduit comprising the steps of providing a tubing branching piece 2, which is formed with an encompassing rib 10, and attaching an end

Art Unit: 1732

of a hose 6,7,8 to the branching piece 2 by engaging with the rib 10 such that a form-locking coupling is formed and attaches the hose and the branching piece. The assembly is placed within a molding cavity of an injection mold (not shown), and a plastic connector 15 is formed around the assembly. (col. 4, lines 38-68; col. 5, lines 1-15; col. 6, lines 4-20).

Further, the reference does teach as conventional the desire for the tube ends to rest tightly in the branching piece, and sets forth forming the inner contour of the tube to match or correspond to the outer contour of the branching piece, having a sawtooth groove so that a form locking connection - one in which two elements due to the shape of the elements - is produced when the two pieces are mated. (col. 6, lines 10-20 and col. 4, lines 60-65). The cited reference does not teach forming a hollow cylinder having a thread on its interior surface.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a threaded surface for forming a form lock as desired, as a threaded surface equivalently locks two elements together based on shape and would thus be an equivalent alternative lock form. To so include the surface on the exterior or the interior is deemed an obvious alternative, dependent on the choice of the practitioner.

With respect to claim 3, note that the molded shape can be any conventional configuration, and is depicted as not fully covering the hose or the branch as claimed. (See figure 2).



Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hartel et al., USP 5,302,336, as applied to claims 1 and 3 above, in view of Carlson, USP 6,190,480.

The cited primary reference substantially teaches the basic claimed process of molding an assembly useful for the flow of fluids, including a connector on the end of a conduit comprising the steps of providing a tubing branching piece 2, which is formed with an encompassing rib 10, and attaching an end of a hose 6,7,8 to the branching piece 2 by engaging with the rib 10 such that a form-locking coupling is formed and attaches the hose and the branching piece. The assembly is placed within a molding cavity of an injection mold (not shown), and a plastic connector 15 is formed around the assembly. (See col. 4, lines 38-68; col. 5, lines 1-15; col. 6, lines 4-20).

The cited primary reference does not teach forming a hollow cylinder having a thread on its interior surface, or a bead covered conductor wrapped around the inner wall of the conduit.

The added secondary reference teaches as conventional a tubing product with a threaded exterior surface, having a beaded electrical conductor wrapped around the inner wall of the tube. The preferred use of the tube product is for breathing apparatus, wherein there is a long felt need for making hoses having a reduced rate of heat loss for conditioning the flow of fluid to the patient. However, the versatility of this kind of hose is useful in other fields including construction, etc. See col. 10, lines 24-31,45-60; and figures 1 and 10.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the tubing product of the secondary reference, when performing the hose assembly method set forth in the primary reference, for making a hose assembly with a reduced rate of heat loss and for conditioning the flow of any conventional fluid through the hose assembly.

The primary reference also teaches as conventional the desire for the tube ends to rest tightly in the branching piece, and sets forth forming the inner contour of the tube to match or correspond to the outer contour of the branching piece, having a sawtooth groove so that a form locking connection - one in which two elements due to the shape of the elements - is produced when the two pieces are mated. See col. 6, lines 10-20 and col. 4, lines 60-65.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a threaded surface for forming a form lock as desired, particularly with the threaded tube shown in the added reference, for equivalently locking the two elements together, as such is an equivalent alternative lock form that is desired in the primary reference. To so include the surface on the exterior or the interior is deemed an obvious alternative, dependent on the choice of the practitioner.

***Conclusion***

All claims are rejected.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: U.S. Patents 3,963,856; 4,292,267; and RE24,468 disclose analogous methods.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Wollschlager whose telephone number is 571-272-8937. The examiner can normally be reached on Monday - Thursday 7:00 - 4:45, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 1732

JW

Jeff Wollschlager  
Examiner  
Art Unit 1732

February 2, 2007

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SUPERVISORY PATENT EXAMINER  
2/10/07